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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/555,141	10/31/2005	Alexander Hauser	RAC0082	2898
832	7590	03/24/2006	EXAMINER	
BAKER & DANIELS LLP 111 E. WAYNE STREET SUITE 800 FORT WAYNE, IN 46802			AHMADI, MOHSEN	
			ART UNIT	PAPER NUMBER
			2812	

DATE MAILED: 03/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/555,141	Applicant(s) HAUSER ET AL.	
	Examiner Mohsen Ahmadi	Art Unit 2812	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 October 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>01/30/2006</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

The application number 10/555,141 for a "Method For Texturing of Silicon Wafers" filed 05/07/2003 has been examined.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nishimoto et al. (US Pat. 6,340,640).

Regarding claims 1, 2 and 5, Nishimoto et al. discloses a method of dipping silicon wafer in a mixed solution comprising a 50% concentrated hydrofluoric acid, 69% concentrated nitric acid and 85% phosphoric acid in the proportions of 12 parts by volume, 1 part by volume and 12 parts by volume for a time to obtain a predetermined amount of etching while the mixed solution is maintained at the room temperature then water is added to the above-mentioned 50% hydrofluoric acid, 69% nitric acid and 85% phosphoric acid to lower the concentration (See col. 6 lines, 6-30). The examiner makes note that Nishimoto et al. does not explicitly state the percentage ranges for etching solution as requires by claim language. However the examiner also makes note that the percentage ranges is a matter of optimization. It would have been obvious to one of ordinary skill in the art at the time of the invention, to optimize the percentage

ranges of Nishimoto et al. and arrive at the claimed limitation. The ranges of an optimization would be within the skill of one of ordinary skill in the art. The determination of the percentage ranges is a matter of optimization. See *In re Aller*, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955).

Regarding claim 3, Nishimoto et al. discloses a method wherein the temperature of etching solution is at a room temperature (See col. 6 lines, 6-21). The determination of the temperature is a matter of optimization. See *In re Aller*, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955).

Regarding claim 4, Nishimoto et al. discloses a method wherein silicon wafers are dipped in an etching solution (See cols. 5 and 6 lines 65-67 and 1-3). The determination of the minutes is a matter of optimization. See *In re Aller*, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955).

Regarding claim 6, Nishimoto et al. discloses a method wherein the silicon wafers are oriented substantially vertically and etching solution has a flow component (See cols. 4 and 14 lines 48-58 and 40-59).

Regarding claim 7, Nishimoto et al. discloses a method wherein the silicon wafers are oriented substantially horizontally and etching solution is quiescent (See cols. 14 lines 40-59).

Regarding claim 8, Nishimoto et al. discloses a method wherein the silicon wafers are moved through etching solution (See cols. 14 lines 23-31).

Regarding claim 9, Nishimoto et al. discloses a method wherein the silicon wafers are polycrystalline (See col. 3 lines 14-18).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mohsen Ahmadi whose telephone number is 1-571-272-5062. The examiner can normally be reached on Mon-Fri 8:00am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Lebentritt can be reached on 1-571-272-1873. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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MA

03/15/2006



MICHAEL LEBENTRITT
SUPERVISORY PATENT EXAMINER